

This report is a preliminary investigation into what improvements need to be made on State Route 127 to safely accommodate an increase in trucks from the possible shipments of high level nuclear waste and low level radioactive waste to The Nevada Test Site or Yucca Mountain in the State of Nevada.

State route 127 extends northward from its southern junction with Interstate 15, near Baker, in San Bernardino County through Caltrans District 8 to the Inyo County line. From there SR 127 traverses through Caltrans District 9, in Inyo County to the Nevada State boundary where it becomes Nevada SR 373. The total route length in District 9 is 49.42 miles. SR 127 is a rural two-lane conventional highway with traveled lanes measuring 3.6 m wide and shoulders measuring less than 0.6 m in width. This route is not designated as a SHELL (Subsystems of Highways for the movement of Extra-Legal Permit Loads) highway nor an AB 866 truck route that the Federal Highway Administration designates as a route suitable for larger trucks. Since this is a minor arterial /low volume route it has been assigned a Maintenance Service Level rating of 3 by Caltrans.

Flash floods present recurring problems at six locations where the roadway crosses the normally dry Amargosa River. On average such flooding occurs twice a year causing considerable damage to the pavement surface and supporting roadbed, and results in road closures for sustained periods once every two years. Flows have been measured in excess of 10,000 CFM during major storms. Flash flooding also occurs in numerous locations where dry washes cross the road on the first 29 miles of SR 127 before it reaches the Amargosa River Valley.

In 1994, Inyo County and Caltrans conducted a highway travel survey on SR 127 to determine a profile of highway users. Survey results indicated that about 66 percent of all trips on this route were recreational in nature while only about 20 percent were work/and or business related. The survey revealed that as high as 87 percent of all trips began and ended outside the SR 127 corridor, with most of the travelers visiting Death Valley National Park. Recreational Vehicles counts ranged from between 3 and 12 percent of the total traffic observed. Trucks (excluding RVs and pickups) accounted for between 8 and 14 percent of the total traffic counted on SR 127. The 1995 machine count study revealed that truck traffic ranged from a high of 4,012 vehicles in February, to a low of 1,718 in July, and averaged about 2660 per month. According to local California Highway Patrol Officials, local truck traffic, which comprises a large percentage of the overall total of trucks, comes from two main sources. A large dairy, which is located in Amargosa, operates seven days a week has several trucks traveling to Baker on SR 127 daily. Mining operations at the Billie Mine near Death Valley National Park also creates several shipments a day from the junction of SR190 and SR127 north to a mill at the Nevada state border in Amargosa Valley.

There are three types of truck shipments that may effect how State Route 127 is planned for the future. State Route 127 may be considered as a route for high level radioactive waste to the proposed nuclear waste repository at Yucca Mountain, Nevada. It is already being used as a route for low-level radioactive waste originating in Fernald, Ohio and ending at the Nevada Test Site. Approximately 15 trucks per week are now using this route to reach their final destination at the Nevada Test Site. It is also being considered as a route to transport transuranic materials (protective clothing, etc., contaminated with elements such as plutonium) from the Nevada Test Site to the Waste

Isolation Pilot Plant located in Carlsbad, New Mexico. Shipments of transuranic waste may begin as early as 2005 according to the DOE.

With the anticipation of increased truck traffic by DOE facilities the increased risk of hazardous waste spills, and an increase of local traffic due to the population boom in Southern Nevada (Pahrump and Las Vegas), the following recommendations should be considered.